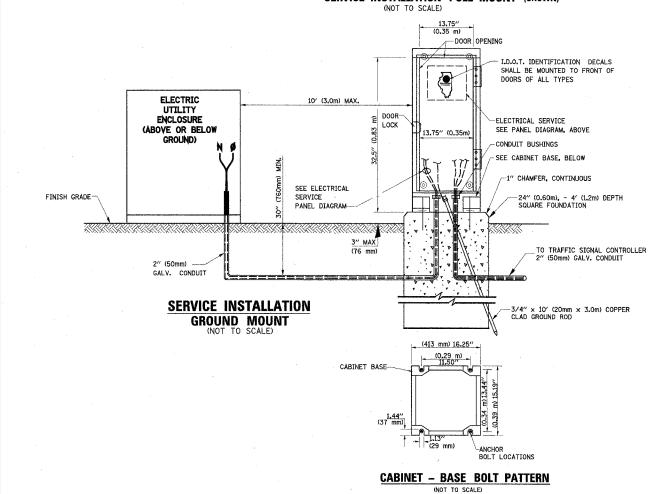


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)

SERVICE BY UTILITY CO.

-1/C GROUND (GREEN COLOR CODED)

2/C (NEUTRAL-WHITE, PHASE-BLACK)

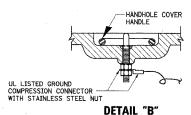


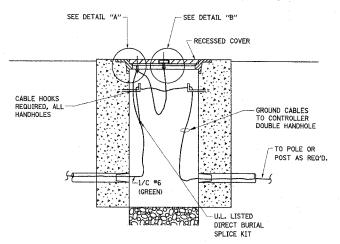
3/4" (20mm) GALV. CONDUIT

(SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)

ELECTRICAL SERVICE TO TRAFFIC SIGNAL CONTROLLER

HANDHOLE COVER CAST CORNER FRAME WEB ULLISTED GROUND COMPRESSION CONNECTOR DETAIL "A" -STAINLESS STEEL NUT AND 2 STAINLESS

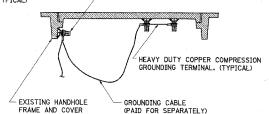




HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER, (TYPICAL)



EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

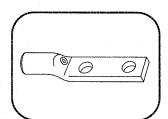
NOTES:

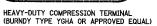
			CUN	IKAL	I NO.	60020
F.A.U. RTE.	SECTION		COUNTY		TOTAL SHEETS	SHEET NO.
332	2007-037TS		COOK/WILL		34	5
STA.		1	O STA.			
FFD. RO	AD DIST. NO.	ILL IN	OIS FED.	AID	PROJECT	-

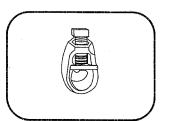
GROUNDING SYSTEM

D-91-343-07

- 1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. \times 10'-0" (20mm \times 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS. CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT
- 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



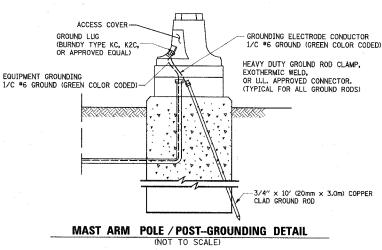




3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

NOTES

· ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. • GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



REVISIONS		THE TRIOTS DEDARTMENT	OF TRANSPORTATION			
NAME	DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION				
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	1	. DI CTDI	OT ONE			
	-	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS				
		STANDARD TRAFFIC SIGNAL				
		DESIGN DETAILS				
		VEAT	DRAWN BY: BL			
		SCALE: VERT. NONE				
			CHECKED BY: ER/TC			
		DATE 11/26/07				